Qocket No.: 005920 USA/PMG/PCTRI/JW

PATENT/OFFICIAL

., IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

re Application of

SHANMUGASUNDRAM et al.

Serial No. 09/943,383

Group Art Unit: 2823

Filed: August 31, 2001

: Examiner: William D. Coleman

For:

IN SITU SENSOR BASED CONTROL OF SEMICONDUCTOR PROCESSING

PROCEDURE

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Honorable Commissioner for Patents Alexandria, VA 22313-1450

Sir:

able Commissioner for Patents adria, VA 22313-1450

In accordance with the provisions of 37 C.F.R. 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the documents listed on the attached form PTO-1449. It is respectfully requested that the documents be expressly considered during the prosecution of this application, and that the documents be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is being filed within three months of the U.S. filing date OR before the mailing date of a first Office Action on the merits. No certification or fee is required.

This submission does not constitute a representation that a search has been made or that no better art exists and does not constitute an admission or representation that any of the listed documents is material or constitutes prior art. If it should be determined that any of the listed documents does not constitute prior art under the United States law, Applicants reserve the right

Serial No. 09/943,383

to present to the Office the relevant facts and law regarding the appropriate status of such document.

No certification or fee is believed to be required. However, the Commissioner is hereby authorized to charge any additional fees should any be required for this submission, or credit any overpayment to deposit account no. 08-0219.

Respectfully submitted,

HALE AND DORR LLP

Scott M. Alter

Registration No. 32,879

Reston Town Center 11951 Freedom Drive Reston, VA 20190

TEL (703) 654-7021 SMA/mgm

FAX (703) 654-7100 Date: 12(8/05

INFORMATION DISCLOSURE CITATION IN AN APPLICATION (PTO-1449)

ATTY. DOCKET NO. 005920 USA/PMG/PCTRL/JW SERIAL NO. 09/943,383

APPLICANT

SHANMUGASUNDRAM et al.

FILING DATE August 31, 2001 GROUP 2823

1 1	1.1.11.		J.S. PATENT DOCUMENTS				
EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILIN	G DAT
	4,207,520	06/10/80	Flora et al.			04/06	/78
	4,209,744	06/24/80	Gerasimov et al.			03/27/78 09/13/84 07/23/86 05/16/94 01/03/95	
	4,609,870	09/02/86	Lale et al.				
	4,755,753	07/05/88	Chern				
	5,427,878	06/27/95	Corliss				
	5,534,289	07/09/96	Bilder et al.				
	5,867,389	02/02/99	Hamada et al.			11/26	/96
	6,041,263	03/21/00	Boston et al.		1	10/01	/97
	6,077,412	06/20/00	Ting et al.			10/30/98 02/08/99 07/21/00 07/06/01 08/08/00 03/27/01 06/20/00	
	6,271,670	08/07/01	Caffey				
	6,400,162	06/04/02	Mallory et al.				
	US 2002/0077031	06/20/02	Johansson et al.				
	6,442,496	08/27/02	Pasadyn et al.				
	6,563,308	05/13/03	Nagano et al.				
	6,587,744	07/01/03	Stoddard et al.				
	*	FOR	EIGN PATENT DOCUMENT	TS	•	-	
EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Tran	slation
INITIALS				CLASS		Yes	No
	WO 01/11679	02/15/01	WIPO			Х	
	WO 01/080306	10/25/01	WIPO			Х	—
	OTHE	R ART (Inclu	ding Author, Title, Date, Pert	tinent Pages, Etc	:.)	·	
	conductivity by rac 799 – 805.	lio frequency	n, and J. D. Wiley. July 1976. "C-free-carrier power absorption."	Rev. Sci. Instrun	ı., Volume 47		
	www.Lehighton.co	m/fabtech1/ir			Systems."		
-	2000. "Microsense	II Capacitan	ce Gaging System." www.adetec	ch.com.			
XAMINER	•		DATE CONSID	rnen			

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

O1PE 2003 33

SHEET 2 OF 2

INFORMATION DISCLOSURE
CITATION IN AN
APPLICATION
(PTO-1449)

ATTY. DOCKET NO. 005920 USA/PMG/PCTRL/JW SERIAL NO. 09/943,383

APPLICANT

SHANMUGASUNDRAM et al.

FILING DATE August 31, 2001 GROUP 2823

FOREIGN PATENT DOCUMENTS **EXAMINER'S** Translation INITIALS PATENT NO. DATE COUNTRY CLASS SUBCLASS Yes No OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.) El Chemali, Chadi et al. July/August 2000. "Multizone uniformity control of a chemical mechanical polishing process utilizing a pre- and postmeasurement strategy." J. Vac. Sci. Technol. Volume 18, No. 4. pp. 1287 - 1296. March 5, 2001. "KLA-Tencor Introduces First Production-worthy Copper CMP In-situ Film Thickness and End-point Control System." http://www.kla-tencor.com/j/servlet/NewsItem?newsItemID=74. 2002. "Microsense II - 5810: Non-Contact Capacitance Gaging Module." www.adetech.com. 08 August 2003. PCT International Search Report from PCT/US03/08513. 14 October 2003. PCT International Search Report from PCT/US02/21942. 20 October 2003. PCT International Search Report from PCT/US02/19116. 23 October 2003. PCT International Preliminary Examination Report from PCT/US01/24910. "NanoMapper wafer nanotopography measurement by ADE Phase Shift." http://www.phaseshift.com/nanomap.shtml. "Wafer flatness measurement of advanced wafers." http://www.phase-shift.com/wafer-flatness.shiml. "ADE Technologies, Inc. - 6360." http://www.adetech.com/6360.shtml. "3D optical profilometer MicroXAM by ADE Phase Shift." http://www.phase-shift.com/microxam.shtml. "NanoMapper FA factory automation wafer nanotopography measurement." http://www.phaseshift.com/nanomapperfa.shtml. EXAMINER DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

EDEC 24 2003